



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,049	07/31/2003	Linda Benhase	TUC920020093US1	3583
46917 7590 04/23/2007 KONRAD RAYNES & VICTOR, LLP. ATTN: IBM37 315 SOUTH BEVERLY DRIVE, SUITE 210 BEVERLY HILLS, CA 90212			EXAMINER BRUCKART, BENJAMIN R	
			ART UNIT 2155	PAPER NUMBER

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/23/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/633,049	<b>Applicant(s)</b> BENHASE ET AL.	
	<b>Examiner</b> Benjamin R. Bruckart	<b>Art Unit</b> 2155	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### **Detailed Action**

Claims 1-30 are pending in this Office Action.

### **Information Disclosure Statement**

The information disclosure statement filed on 7-31-07 has been considered.

### **Claim Rejections - 35 USC § 101**

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 22-30 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

In claim 22, the applicant claims "an article of manufacture for task processing and monitoring of configuration and state information..." Paragraph 49 of applicant's specification explicitly defines such articles as signals, waves, and non-embodied matter.

### **Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1, 3-9, 11; 13-16, 19; 22-25, 28 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,696,895 by Hemphill et al (Applicant IDS).**

Regarding claim 1, a system (Hemphill: Fig. 4), comprising:

Art Unit: 2155

- a cluster (Hemphill: Fig. 4);
- a first agent process at the cluster (Hemphill: col. 5, lines 14-21);
- a second agent process at the cluster (Hemphill: col. 5, lines 14-21);
- a first server process with which the first agent process is registered (Hemphill: col. 5, lines 14-21); and
- a second server process with which the second agent process is registered (Hemphill: col. 5, lines 14-21).

Regarding claim 3, the system of claim 1, wherein the first server process executes at a first cluster and the second server process executes at a second cluster, and wherein the first cluster and the second cluster comprise a server system (Hemphill: Fig. 4, col. 3, lines 32-44).

Regarding claim 4, the system of claim 1, wherein at least one of the first server process and the second server process execute at a host system (Hemphill: col. 3, lines 36-40).

Regarding claim 5, the system of claim 1, further comprising: persistent data at the cluster storing configuration and state information for one or more storage devices accessed by the cluster (Hemphill: Fig. 1, tag 102; switchable disk subsystem).

Regarding claim 6, the system of claim 1, further comprising: means for, when the first server process and first agent process fail while executing a task, executing the task with the second server process and second agent process (Hemphill: col. 4, lines 43-51, 61-67).

Regarding claim 7, the system of claim 1, further comprising: means for, when the first server process and first agent process fail while executing a first task, continuing to execute a second task with the second server process and second agent process (Hemphill: col. 4, lines 43-51, 61-67).

Regarding claim 8, the system of claim 1, further comprising:  
means for detecting a first server and a second server (Hemphill: col. 4, lines 31-40);

Art Unit: 2155

means for registering the first agent process with the first server process at the first server (Hemphill: col. 5, lines 16-33);

means for registering the second agent process with the second server process at the second server (Hemphill: col. 5, lines 16-33);

means for, when a task is to be executed by the first server process, executing the task with the first agent process (Hemphill: col. 3, lines 15-31); and

means for, when the task is to be executed by the second server process, executing the task with the second agent process (Hemphill: col. 3, lines 15-31).

Regarding claim 9, the system of claim 1, wherein the first agent process is launched at the cluster and further comprising: under control of the first agent process,

(i) means for retrieving stored configuration and state information (Hemphill: col. 6, lines 24-45); and

(ii) means for transmitting the retrieved configuration and state information to the first server process (Hemphill: col. 4, lines 4-18).

Regarding claim 11, the system of claim 1, wherein the first agent process is launched if a first server is configured and wherein the second agent process is launched if a second server is configured (Hemphill: col. 6, lines 6-19).

Regarding claim 13, a method for task processing and monitoring of configuration and state information (Hemphill: col. 3, lines 12-47) comprising:

detecting a first server and a second server (Hemphill: col. 4, lines 31-40);

registering a first agent process with a first server process at the first server (Hemphill: col. 5, lines 14-21);

registering a second agent process with a second server process at the second server (Hemphill: col. 5, lines 14-21);

when a task is to be executed by the first server process, executing the task with the first agent process (Hemphill: col. 5, lines 14-21); and

Art Unit: 2155

when the task is to be executed by the second server process, executing the task with the second agent process (Hemphill: col. 5, lines 14-21).

Regarding claim 14, the method of claim 13, further comprising: storing configuration and state information for one or more storage devices accessed by a cluster as persistent data at the cluster (Hemphill: Fig. 1, tag 102; switchable disk subsystem).

Regarding claim 15, the method of claim 14, wherein the first agent process is launched at the cluster and further comprising:

under control of the first agent process,

(i) retrieving the stored configuration and state information (Hemphill: col. 6, lines 24-45); and

(ii) transmitting the retrieved configuration and state information to the first server process (Hemphill: col. 4, lines 4-18).

Regarding claim 16, the method of claim 13, wherein the second agent process is launched at the cluster and further comprising:

under control of the second agent process,

(i) retrieving the stored configuration and state information (Hemphill: col. 6, lines 24-45); and

(ii) transmitting the retrieved configuration and state information to the second server process (Hemphill: col. 4, lines 4-18).

Regarding claim 19, the method of claim 13, wherein the first agent process is launched if a first server is configured and wherein the second agent process is launched if a second server is configured (Hemphill: col. 6, lines 6-19).

Art Unit: 2155

Regarding claim 22, an article of manufacture for task processing and monitoring of configuration and state information, wherein the article of manufacture is capable of causing operations to be performed (Hemphill: col. 3, lines 12-47), the operations comprising:

detecting a first server and a second server (Hemphill: col. 4, lines 31-40);

registering a first agent process with a first server process at the first server (Hemphill: col. 5, lines 14-21);

registering a second agent process with a second server process at the second server (Hemphill: col. 5, lines 14-21);

when a task is to be executed by the first server process, executing the task with the first agent process (Hemphill: col. 5, lines 14-21); and

when the task is to be executed by the second server process, executing the task with the second agent process (Hemphill: col. 5, lines 14-21).

Regarding claim 23, the article of manufacture of claim 22, wherein the operations further comprise: storing configuration and state information for one or more storage devices accessed by a cluster as persistent data at the cluster (Hemphill: Fig. 1, tag 102; switchable disk subsystem).

Regarding claim 24, the article of manufacture of claim 23, wherein the first agent process is launched at the cluster and wherein the operations further comprise:

under control of the first agent process,

(i) retrieving the stored configuration and state information (Hemphill: col. 6, lines 24-45); and

(ii) transmitting the retrieved configuration and state information to the first server process (Hemphill: col. 4, lines 4-18).

Regarding claim 25, the article of manufacture of claim 23, wherein the second agent process is launched at the cluster and wherein the operations further comprise:

under control of the second agent process,

Art Unit: 2155

(i) retrieving the stored configuration and state information (Hemphill: col. 6, lines 24-45); and

(ii) transmitting the retrieved configuration and state information to the second server process (Hemphill: col. 4, lines 4-18).

Regarding claim 28, the article of manufacture of claim 22, wherein the first agent process is launched if a first server is configured and wherein the second agent process is launched if a second server is configured (Hemphill: col. 6, lines 6-19).

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,696,895 by Hemphill et al (Applicant IDS) in view of U.S. Patent Publication No. 20030187927 by Winchell.**

Regarding claim 2, the Hemphill reference teaches the system of claim 1.

The Hemphill reference fails to teach a first and second and third clusters.

However, the Winchell reference teaches a cluster is a first cluster, wherein the first server process executes at a second cluster, and wherein the second server process executes at a third cluster (Winchell: page 10, para 180) in order to allow concurrent and cooperative work together between systems (Winchell: page 1, para 5).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include a plurality of clusters as included by Winchell in order to allow concurrent and cooperative work together between systems (Winchell: page 1, para 5).



**Claims 10, 17-18, 26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,696,895 by Hemphill et al (Applicant IDS) in view of U.S. Patent No. 6,108,699 by Moiin.**

Regarding claim 10, the Hemphill reference teaches the system of claim 1, wherein the first agent process is launched at the cluster.

The Hemphill reference fails to teach changed configuration information.

However, the Moiin reference teaches:

means for receiving at least one of changed configuration information and changed state information for the cluster (Moiin: col. 5, lines 47-65);

means for storing the at least one of changed configuration information and state information as persistent data at the cluster (Moiin: col. 7, lines 53-61); and

under control of the first agent process,

(i) means for retrieving the stored at least one of changed configuration information and state information (Moiin: col. 9, lines 66- col. 10, line 3; col. 14, line 10-24); and

(ii) means for transmitting the retrieved at least one of changed configuration information and state information to the first server process (Moiin: col. 13, line 61,62) in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include changed configuration data as included by Moiin in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

Regarding claim 17, the Hemphill reference teaches the method of claim 13, wherein the first agent process is launched at the cluster. The Hemphill reference fails to teach changed configuration information.

However, the Moiin reference teaches:

receiving at least one of changed configuration information and changed state information for the cluster;

storing the at least one of changed configuration information and state information as persistent data at the cluster; and

under control of the first agent process,

(i) retrieving the stored at least one of changed configuration information and state information; and

(ii) transmitting the retrieved at least one of changed configuration information and state information to the first server process in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include changed configuration data as included by Moiin in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

Regarding claim 18, the Hemphill reference teaches the method of claim 14, wherein the second agent process is launched at the cluster. The Hemphill reference fails to teach changed configuration information.

However, the Moiin reference teaches:

receiving at least one of changed configuration information and changed state information for the cluster; storing the at least one of changed configuration information and state information as persistent data at the cluster; and

under control of the second agent process,

(i) retrieving the stored at least one of changed configuration information and state information; and

(ii) transmitting the retrieved at least one of changed configuration information and state information to the second server process in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include changed configuration data as included by Moiin in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

Art Unit: 2155

Regarding claim 26, the Hemphill reference teaches the article of manufacture of claim 23, wherein the first agent process is launched at the cluster and wherein the operations.

The Hemphill reference fails to teach changed configuration information.

However, the Moiin reference teaches:

receiving at least one of changed configuration information and changed state information for the cluster;

storing the at least one of changed configuration information and state information as persistent data at the cluster; and

under control of the first agent process,

(i) retrieving the stored at least one of changed configuration information and state information; and

(ii) transmitting the retrieved at least one of changed configuration information and state information to the first server process in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include changed configuration data as included by Moiin in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

Regarding claim 27, the Hemphill reference teaches the article of manufacture of claim 23, wherein the second agent process is launched at the cluster and wherein the operations.

The Hemphill reference fails to teach changed configuration information.

However, the Moiin reference teaches:

receiving at least one of changed configuration information and changed state information for the cluster;

storing the at least one of changed configuration information and state information as persistent data at the cluster; and

under control of the second agent process,

(i) retrieving the stored at least one of changed configuration information and state information; and

Art Unit: 2155

(ii) transmitting the retrieved at least one of changed configuration information and state information to the second server process in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include changed configuration data as included by Moiin in order to improve reliability in a distributed computer system (Moiin: col. 2, lines 5-7).

**Claims 12, 20-21, 29-30 are rejected under 35 U.S.C. 103(a) as being unpatentable by U.S. Patent No. 5,696,895 by Hemphill et al (Applicant IDS) in view of U.S. Patent Publication No. 20030093467 by Anderson.**

Regarding claim 12, the Hemphill reference teaches the system of claim 1 with a first and second agent process.

The Hemphill reference fails to teach storing identification for the agent.

However, the Anderson reference teaches

means for receiving a request to execute the task from the first server process (Anderson: pages 1-2, para 14);

means for storing identification for the first agent process in persistent data (Anderson: page 8, para 103);

means for invoking a driver process for executing the task (Anderson: pages 1-2, para 14);

means for receiving task completion status from the driver process (Anderson: pages 1-2, para 14); and

means for forwarding the task completion status to the first server process (Anderson: pages 1-2, para 14) in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include agent identification as included by Anderson in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

Regarding claim 20, the Hemphill reference teaches the method of claim 13 with a first and second agent process.

The Hemphill reference fails to teach storing identification for the agent.

However, the Anderson reference teaches  
receiving a request to execute the task from the first server process (Anderson: pages 1-2, para 14);  
storing identification for the first agent process in persistent data (Anderson: page 8, para 10);  
invoking a driver process for executing the task (Anderson: pages 1-2, para 14);  
receiving task completion status from the driver process (Anderson: pages 1-2, para 14);  
and  
forwarding the task completion status to the first server process (Anderson: pages 1-2, para 14) in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include agent identification as included by Anderson in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

Regarding claim 21, the Hemphill reference teaches the method of claim 13 with a first and second agent process.

The Hemphill reference fails to teach storing identification for the agent.

However, the Anderson reference teaches  
receiving a request to execute the task from the second server process (Anderson: pages 1-2, para 14);  
storing identification for the second agent process in persistent data (Anderson: page 8, para 10);  
invoking a driver process for executing the task (Anderson: pages 1-2, para 14);

Art Unit: 2155

receiving task completion status from the driver process (Anderson: pages 1-2, para 14);  
and

forwarding the task completion status to the second server process (Anderson: pages 1-2, para 14) in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include agent identification as included by Anderson in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

Regarding claim 29, the Hemphill reference teaches the article of manufacture of claim 22 with a first and second agent process.

The Hemphill reference fails to teach storing identification for the agent.

However, the Anderson reference teaches

receiving a request to execute the task from the first server process (Anderson: pages 1-2, para 14);

storing identification for the first agent process in persistent data (Anderson: page 8, para 10);

invoking a driver process for executing the task (Anderson: pages 1-2, para 14);

receiving task completion status from the driver process (Anderson: pages 1-2, para 14);  
and

forwarding the task completion status to the first server process (Anderson: pages 1-2, para 14) in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include agent identification as included by Anderson in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

Art Unit: 2155

Regarding claim 30, the Hemphill reference teaches the article of manufacture of claim 22 with a first and second agent process.

The Hemphill reference fails to teach storing identification for the agent.

However, the Anderson reference teaches

receiving a request to execute the task from the second server process (Anderson: pages 1-2, para 14);

storing identification for the second agent process in persistent data (Anderson: page 8, para 10);

invoking a driver process for executing the task (Anderson: pages 1-2, para 14);

receiving task completion status from the driver process (Anderson: pages 1-2, para 14);  
and

forwarding the task completion status to the second server process (Anderson: pages 1-2, para 14) in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

It would have been obvious at the time of the invention to one of ordinary skill in the art to create the system as taught by Hemphill to include agent identification as included by Anderson in order to provide task and resource scheduling between agents and servers (Anderson: page 8, para 107).

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Benjamin R Bruckart whose telephone number 571-272-3982.

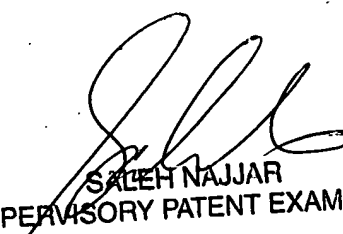
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached on (571) 272-4006. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and after final communications.

Art Unit: 2155

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the examiner whose telephone number is 571-272-3982.

Benjamin R Bruckart  
Examiner  
Art Unit 2155

PRB



SALEH NAJJAR  
SUPERVISORY PATENT EXAMINER